

U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office

Species Account TIBURON JEWELFLOWER

Streptanthus niger



CLASSIFICATION: Endangered

Federal Register Notice 60:6671; February 3, 1995

http://ecos.fws.gov/docs/federal_register/fr2779.pdf (125 KB)

STATE LISTING STATUS AND CNPS

This species was listed as endangered by the California Department of Fish and Game in February 1990. The California Native Plant Society has placed it on List 1B (rare or endangered throughout its range).

CRITICAL HABITAT: Not designated

RECOVERY PLAN: Final

Recovery Plan for Serpentine Soil Species of the San Francisco

Bay Area; September 30, 1998.

http://ecos.fws.gov/docs/recovery_plan/980930c_v2.pdf (22

MB)

5-YEAR REVIEW: Started March 25, 2009 http://www.fws.gov/policy/library/E8-4258.html



Tiburon Jewelflower © Rick York and CNPS

DESCRIPTION



Tiburon Jewelflower © 2009 Neal Kramer

Tiburon jewelflower is an annual herb of the mustard family (Brassicaceae). It reaches 30 to 60 centimeters (1 to 2 feet) in height. The lower leaves are toothed, the upper leaves less toothed or not at all.

The sepals are a very dark purple; the petals have a purple claw and a white blade with a purple midvein. The pods are erect, almost straight and 4 to 7 centimeters (1.5 to 2.75 inches) long.

The zig-zag inflorescence and the lack of hairs distinguish this plant from its near relative *Streptanthus glandulosus* (bristly jewelflower). See Hickman (1993) in General Information about California Plants, below, for a detailed description of these species.

Seedlings of appear in March and April. The plants flower from May to June. Seed capsules open in late June. The species is self-pollinated.

SERPENTINE SOIL PLANTS:

Serpentine soils are formed from weathered volcanic (ultramafic) rocks such as serpentinite, dunite, and peridotite. These soils provide a harsh environment for plant growth. Several factors contribute to the inhospitability of serpentine soils to plant growth

- 1) Low calcium-magnesium ratio;
- 2) Lack of essential nutrients such as nitrogen, potassium, and phosphorous; and
- 3) High concentrations of heavy metals (mineral toxicity).

However, serpentine plant species have adapted to serpentine soils and require them to survive.

See the <u>recovery plan</u> (above) for more information about serpentine soil species.

Contact the Coastal Branch of our office (formerly the Coast-Bay-Delta Branch) at 916-414-6625 for consultations concerning serpentine soil species.

The Bay Checkerspot Butterfly PDF | RTF is an insect that depends on serpentine soil plants, primarily dwarf plantain (*Plantago erecta*).

DISTRIBUTION

Tiburon jewelflower is found on shallow rocky serpentine soils on slopes of the southern Tiburon Peninsula at elevations of approximately 100 meters (350 feet).

U.S. Geological Survey 7.5 Minute Quads: San Quentin (466B) 3712284.

THREATS

Tiburon jewelflower is an extremely narrowly-distributed species; its entire range amounts to less than one-third of a square mile. Urban development has destroyed over 40 percent of potential habitat.

REFERENCES FOR ADDITIONAL INFORMATION

General references about California plants

www.fws.gov/sacramento/es/plant_spp_accts/plant_references.htm

Kruckeberg, A.R. 1958. The taxonomy of the species complex, *Streptanthus glandulosus* Hook. Madroño 14(7):217-227.

_______. 1984a. California serpentines: Flora, vegetation, geology, soils, and management problems. University of California Press, Berkeley, California. 180 pp.

______. 1984b. The flora on California's serpentine. Fremontia 11(5): 3-10.

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